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ABSTRACT

This paper (1) reviews the literature and examines historically some of the more important theoretical highlights that pertain to both self-as-subject and self-as-object definitions of self, (2) briefly describes and discusses the various assessment approaches designed to assess "self concept" in young children according to a specially developed classificatory schema, (3) enumerates suggestions to aid the future evaluation of children in early childhood education programs. Extensive references are provided. (WY)

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THE ASSESSMENT OF "SELF-CONCEPT" IN EARLY CHILDHOOD EDUCATION*

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The vast[1] and obfuscated literature that pertains to self has been accumulating from at least the time of the Homeric writings. The ancient Greeks distinguished between the physical human body and some nonphysical entity or function, which translated later into English, meant either "psyche," or "soul," or "spirit" (Diggory, 1966). Since that time, self as a construct has been defined by theorists in many varied ways.[2]

Allport (1943), for example, listed eight ways in which self had been conceived; viz. (1) as knower, (2) as object of knowledge, (3) as primordial selfishness, (4) as dominator, (5) as a passive organizer and rationalizer, (6) as a fighter for ends, (7) as one segregated behavioral system among others, and (8) as a subjective patterning of cultural values. Most contemporary theorists, however, define "self" either as a group of psychological processes which govern behavior and adjustment, or as an organized collection of the attitudes and feelings a person has about himself.

The first of these current meanings may be called the "self-as-subject" definition. The self is viewed as that "part of the person... which carries out psychic, mental, or psychological acts; the agent for behavior (as distinguished from physiological activities)" (English and English, 1958, p. 485). It is also called the "self-as-process" definition; self in this context is treated as a "doer, in the sense that it consists of an active group of processes such as thinking, remembering, and perceiving" (Hall and Lindzey, 1970, p. 516). The second meaning is called "the self-as-object" definition, since it denotes the person's attitudes, feelings, perceptions, and evaluations

of himself as an object. In this sense, the self is what a person thinks of himself" (Hall and Lindzey, 1970, p. 516). The construct self-concept commonly has been used to refer to this second definition, and it is upon self-concept and its assessment that this paper will be focused.

The first task of the paper will be to examine historically some of the more important theoretical highlights that pertain to both self-as-subject and self-as-object definitions of self. Secondly, according to a specially developed classificatory schema, the various assessment approaches designed to assess "self-concept" in young children will be briefly described and discussed. Finally, some suggestions will be enumerated to aid the future evaluation of children in early childhood educational programs.

I. SELF: HISTORICAL HIGHLIGHTS

In the early 1890's, William James, the ubiquitous philosopher/psychologist, brought the topic of self to the attention of American social scientists. Like Descartes,[3] Kant, and Schopenhauer before him, James (1961) distinguished between "the self as known, or the me, the 'empirical ego'...and...the self as knower, or the I, the 'pure ego'" (p. 43). James believed that a man's me, which he subdivided into three constituent classes, "is the sum total of all that he CAN call his" (p. 44). The material me included man's body, his clothes, family, home, possessions, and works. The social me was thought to be the recognition a man receives from others. But, more importantly, James believed that man "has as many different social selves as there are distinct groups of persons about whose opinion he cares" (p. 46). By the spiritual me, he referred to the active-feeling states

of consciousness: "the entire collection of my states of consciousness, my psychic faculties and dispositions" (p. 48). The I, for James, was the stream of thought that constitutes one's sense of personal identity: "that which at any given moment is conscious...the me is only one of the things which it is conscious of" (p. 62). The I is "the thinker...a permanent substance or agent...'Soul,' 'transcendental Ego,' 'Spirit'" (p. 63). James, in effect, felt that it was sufficient to admit that knowing goes on. A separate knowing-ego was, for him, not a necessary assumption (Allport, 1943).

James, and a number of his distinguished contemporaries, including Titchener, Dewey, Cooley, and McDougall felt the need to posit a self or ego as a conception without which psychological theory just wouldn't make much sense (Sarbin, 1951). There was, however, considerable disagreement among these thinkers as to the nature of the self, how the self is developed, and its function in various psychological processes.[4] Titchener, for example, focused upon the pure ego, the I in Jamesian terminology, while Cooley and McDougall concerned themselves with the empirical self, the me. Titchener described the self as that "particular combination of talent, temperament and character--of intellectual, emotive and active mental constitution--that makes up an individual mind" (1923, p. 544). For Dewey (1891), the ego, or what James called the "pure ego," was that aspect of self that "has the power of recognizing itself as I, or a separate existence or personality" (p. 1). He indicated that the self as subject "holds together all feelings, purposes, and ideas; and serves to differentiate the self from object" (p. 1). And, following the tradition of Descartes,[5] Dewey argued that

the self was a fact of consciousness: "The self not only exists, but may know that it exists; ...the soul not only is, and changes, but it knows that it is, and what these experiences are which it passes through. It exists for itself. That is to say, it is a self" (p. 2). So absorbed was Dewey with self that he defined psychology as the "science of the facts or phenomena of self" (1891, p. 1). It was not Dewey's intention that this definition would provide a clear and complete notion of the content of the science, for as he reasoned, "it is the business of psychology to clear up and develop what is meant by the facts of self" (p. 1).[6]

One of the earliest theorists to treat the self in a naturalistic fashion, Cooley (1902) dealt exclusively with the empirical self (what James called the "me") and not at all with the metaphysical self or pure ego. By the empirical self Cooley meant "the self that can be apprehended or verified by ordinary observation" (p. 136). He defined "self" as "that which is designated in common speech by the pronouns of the first person singular, 'I,' 'me,' 'mine,' and 'myself'" (p. 136). Cooley's "I" is a conscious, cognizant I: the I of daily speech and thought. The pronoun "I" refers, stated Cooley, "chiefly to opinions, purposes, desires, claims, and the like concerning matters that involve no thought of the body" (p. 144). In this context Cooley indicated that the locus of the I is not the material body, but rather one's self-feelings.[7] Elsewhere, Cooley declared that the "I" refers mainly to "a chracteristic kind of feeling which may be called the my-feeling or sense of appropriation" (p. 137). This emotion or feeling of self is regarded by him as an instinct: "Doubtless evolved in connection with its important function in stimulating and

unifying the special activities of individuals" (p. 139). It is a modifiable instinct, alterable by experience, and thus subject to differentiation and refinement. And, "while retaining...its characteristic tone or flavor, it breaks up into innumerable self-sentiments" (p. 139).

On the basis of his observations of children, Cooley felt that the instinctive self-feeling appears to be associated "chiefly with ideas of the exercise of power" (p. 146). The child, he argued, first attempts to control "visible objects--his limbs, his playthings, his bottle, and the like. Then he attempts to control the persons about him" (p. 146). The self-feeling, recognized by acts of appropriation, always is present in the individual, even from the earliest moments of life. The pronouns "I" and "me" are developed in the child "at first only with those ideas regarding which his appropriate feeling is aroused and defined by opposition" (p. 162). The communicative use of these pronouns allows the child to name the experience of the vague emotion of self and thus ultimately leads to a more concrete image of the phenomena of appropriativeness.

In adult life these pronouns are "applied with a strong sense of their meaning only to things distinguished as peculiar to us by some sort of opposition or contrast. They always imply social life and relation to other persons" (p. 162). It was this latter conception that caused Cooley to become concerned with the social self, which he defined as "any idea, or system of ideas drawn from the communicative life, that the mind cherishes as its own" (p. 147). Cooley emphasized the social self because he believed that the I of common language

PS 004755

"always has more or less distinct reference to other people as well as the speaker" (p. 137). "Our personality," he suggested, "grows and takes form by devining the appearance of our present self to other minds" (p. 176).

McDougall, like James and Cooley, believed that the idea of the self and the self-regarding sentiment are essentially social products, and that their development is effected by constant interplay between personalities and between the self and society:

> The complex conception of self thus attained implies constant reference to others and to society in general, and is, in fact, not merely a conception of self, but always of one's self in relation to other selves (McDougall, 1960, p. 155).

In time, McDougall (1932) developed a comprehensive theory of personality that included a concept of the self-regarding sentiment. The base of the theory is composed of instincts, and is conceived of as organized through learning into "systems which give consistency, continuity and order to our life of striving and emotion; systems which in turn become organized in larger systems, and which, when harmoniously organized in one comprehensive system constitute what we properly call character" (p. 43). Self-sentiments, an intermediate order concept, were seen as deriving from the instincts and having cognitive and conative aspects.

George H. Mead, a social psychologist, often has been referred to as a "social behaviorist," a term which is intended to convey a relationship, though a distinctive one, to the Watsonian brand of behaviorism. Mead, like Cooley before him, was concerned with the development of self-awareness as a function of social interaction. "The self," he argued, "is something which has a development; it is not initially there at birth but arises in the process of social

experience and activity, that is, develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process" (Strauss, 1956, p. 212).[8]

However, Mead was really more interested in the process by which awareness of one's own attributes becomes translated into self-concepts. Mead found the distinguishing trait of selfhood to reside in the capacity of the minded organism to be an object to itself (Morris, 1946). He agreed that "the word 'self,' which is a reflexive...indicates that which can be both subject and object" (Strauss, 1956, pp. 213-214). "The individual," he continued, "experiences himself as such, not directly, but only indirectly, from the particular standpoints of other individual members of the same social group, or from the generalized standpoint of the social group as a whole to which he belongs. For he enters his own experience as a self or individual, not directly or immediately, not by becoming a subject to himself, but only insofar as he first becomes an object to himself just as other individuals are objects to him or in his experience" (Strauss, 1956, p. 15). Thus, insofar as an individual is capable of taking the role of another, he can, as it were, look back at himself from this new perspective, and so become an object to himself (Morris, 1946).

With some notable exceptions (Mead, for one; Calkins, for another),[9] popular interest in this topic waned during the decades when the functionalists and early behaviorists held sway over American psychology. Watson (1925), the most vocal of the behaviorists, argued persuasively that consciousness was neither observable nor measurable, and therefore was inappropriate for psychological study. At this time in American

psychology, few self-respecting psychologists would treat self as a topic for serious experimental study. Self was a subject for armchair speculation, even sophistry, but not the laboratory: self was not behavior; it could not be observed directly.[10]

Theoretical interest in the self was not, however, universally dormant: In Europe, Freud, his followers, and his dissenters actively developed theories concerned with the nature of self. But the European psychologies, as well as those of the English-American, McDougall and the Americans, Cooley and Mead, were not to have an immediate effect upon the American scene. It wasn't until the late 1930's and early 40's that neo-Freudians and phenomenologists (some transplanted to American shores because of the pending European conflagration) were able to convince American psychologists to attend more to the nature of self. And, in the 1950's, with sudden impact, popular interest in the self once more was evidenced in America.

The construct in Freudian theory which comes closest to what we now regard as self is what Freud called the "Ich"--the "I," the "ego." The Freudian ego is a complex structure and can be understood only in the context of Freudian psychology. To more closely approximate what he saw as the functional divisions of the mind; the structural units of the psyche, Freud developed a tripartite construct. These three institutions: the id, the ego, and the superego are to be viewed as concepts, abstractions that refer to specific behaviors.

According to Freud, the true purpose of the individual organism's life is to satisfy its innate needs. The id as viewed by Freud is devoid of reality and is "...a chaos, a cauldron of seething excitement" (1933,

pp. 103-104). It is the reservoir of instinctual energy, existing wholly to gratify instinctual drives (chiefly sex and aggression). Operating principally on the "pleasure principle," the behaviors of the id, reflexive action, and the primary purpose (i.e., fantasy or wish-fulfilling imagery) act to reduce or free the individual (sometimes only temporarily) from tensions.

Another major institution, the superego, was conceived by Freud as composed of two subsystems; the conscience and the ego-ideal. The superego may be said to be composed of a set of response predispositions learned by the individual through experiences in the outer world. It was seen as a complex structure built from identifications with parents, teachers, and society, in general, and is representative of moral restrictions. The superego represents the ideal rather than the real and motivates the individual to strive for perfection rather than to strive for pleasure or reality.

In orthodox Freudian psychology, a portion of the id became differentiated into a new structure that is partly conscious. The new structure, called the "ego," operated on the "reality principle," whose function was to postpone the release of energy until the moment was appropriate. The ego thus was capable of behaviors which were delayable, brought about delay, or were themselves products of delay (Rapaport, 1959). To Freud the ego was the attending, the orienting part of the mental life of the individual. It is the <u>who I am,</u> the <u>what I am doing</u> aspect. Its role is to solve problems, think, plan, structure, and erect defenses to protect itself.[11]

But, Freudian theory conceived of the inner mental world of the individual as if it were a battleground. For example, Anna Freud (1946)

spoke of instinctual impulses that made "hostile incursions into the ego, in the hope of overthrowing it by a surprise-attack" (pp. 7-8). Thus, the ego was viewed as seeking to maintain its integrity and its sometimes uneasy, precarious balance among the three protagonists: itself, the id, and the superego. In the mentally healthy individual the relationships between these three potential combatants is a harmonious one. In the disturbed or maladjusted individual these forces are in conflict with one another.

Alfred Adler, one of the charter members of Freud's Vienna Psychoanalytic Society, later became its president. His views, however, were sometimes at variance with those proposed by Freud, and after many heated debates, Adler resigned from the society and formed his own group. Adler's psychology contrasted with theories that pictured the person as composed of different parts, processes, and mechanisms (e.g., Freudian theory).[12]

Adler named his school of thought "Individual Psychology," to emphasize his belief in the holistic nature of man: the belief that individual behavior cannot be explained adequately by any partial process. He argued that the behavior of individuals is motivated and directed by the unity of personality. This unity he called the "life style." Adler's life style is akin to what Freud called the ego and comes closest to what is meant by self-concept.

The relationship between an individual and the outside world (including the individual's own body, his bodily functions, and the functions of his mind) is determined neither by heredity nor by environment:

> Heredity only endows him with certain abilities. Environment only gives him certain impressions. These abilities and impressions, and the manner in which he 'experiences' them--that is to say, the interpretation he makes of these experiences--are the bricks which he uses in his own 'creative' way in building up his attitude toward life. It is his individual way of using these bricks--or in other words, it is his attitude toward life--which determines his relationship to the outside world (Adler, 1935, p. 51).

According to Adlerians, behavior is not caused by an influence to which the person has been exposed, but rather by his intentions, his concepts, his beliefs, and his expectations as they relate to the immediate situation. It is the person's perceptions, his fictions concerning the world and himself, that determine his behavior more than the so-called reality of the situation. Thus, according to Adler, to predict how a person will behave, we need to know his general outlook on life and the basic assumptions on which he operates; in short, his fictions. These assumptions and concepts are integrated into a basic pattern called the life style. The life style is developed by a continual interaction between the environment and its evaluation determined by the individual.[13]

In modern times there are a number of personality theories that are lumped together under the rubric of ego-psychologies or self-psychologies. Some of these (for example, the theories of Horney (1937), Sullivan (1938, 1940), Kardiner (1939), and Fromm (1939))are relatively theoretically distinct from the theory of Freudian psychology. On the other hand, theories of Anna Freud (1936), Hartmann (1939), and Erickson (1937) are extensions of the psychoanalytic concepts of Freud. These latter psychologists are called "neo-Freudians."

Ego psychologists hold that the ego can be autonomous.[14] Rapaport (1958), a neo-Freudian, believed "...that while man's behavior is determined by drive forces which originate in him, it is not totally at their mercy since it has a certain independence from them." He suggested that "...the ego, which arises in the course of life's struggles, can become unlike the original impulses--can be relatively autonomous from them--and can control them." Rapaport also believed that man may achieve relative autonomy from his environment; i.e., he need not respond to environmental stimulation. In general, psychoanalytic ego psychologists believe that the self does not arise from the energies of the id. Instead, both the id and the ego arise by differentiation from a common undifferentiated matrix, wherein the apparatuses for ego behavior (i.e., memory, motor activity, perceptual ability, etc.) are already present.

Harry Stack Sullivan, a self-theorist, was concerned, as were Cooley and Mead, with the development of self in relationship to the significant others in the child's environment. In his writings, Sullivan tried to show how the social world (of which one, of necessity, must be a part) remains influential in effecting behavior even when one is physically alone (Mullahy, 1965). Sullivan (1953) argued that man is a sociocultural being, and that from the time he is born until the time he can care for himself, he must be cared for by others; others must satisfy his needs. It is from his early experiences in the satisfaction of these needs that the child develops certain basic attitudes of trust or distrust, sometimes referred to as security or insecurity (Dinkmeyer, 1965).

Sullivan argued strongly that some of the attitudes of those persons responsible for mothering the child are conveyed to the child through the operation of empathy (i.e., a means of emotional communication). Thus, if the mother were concerned about her health, for example, such anxiety would be communicated to the child.[15] In general, the basic components of self-concept are produced, according to Sullivan, from the reflected appraisals of significant others in the child's life (Dinkmeyer, 1965).

It was about this time that Raimy (1948) introduced the term "self-concept" in relation to clinical work. He defined the term as "the more or less organized perceptual object resulting from present and past self-observation" (p. 154). Elsewhere, Raimy conceived of self-concept as the "map which each person consults in order to understand himself, especially during moments of crisis or choice" (1948, p. 155).[16]

More comprehensive treatments of self-concept are found in the neoteric theories of Rogers and of Combs and Snygg. Rogers (1951) developed a theory of personality that was basically phenomenological in character and relied upon the construct of self as an explanatory concept. The organism, psychologically conceived, is the locus of all experience. The totality of experience, which includes everything potentially available to awareness, constitutes the phenomenal field. The phenomenal field is the individual's frame of reference and can only be known to the person himself. How the individual behaves depends on the phenomenal field and not upon the stimulating conditions (Hall and Lindzey, 1970).

Gradually, a portion of the phenomenal field becomes differentiated and is referred to by Rogers as the self or self-concept. The self-concept

consists of all the perceptions of self admissable to awareness and contains, for example, one's perception of his characteristics and abilities. It is "the organized, consistent conceptual gestalt composed of perceptions of the characteristics of the 'I' or 'me' and the perceptions of the relationships of the 'I' or 'me' to others and to various aspects of life, together with the values attached to these perceptions" (Rogers, 1959, p. 200).

Combs and Soper (1957) defined the self-concept as "the organization of all that the individual refers to as 'I' or 'me'...a patterned relationship or 'gestalt.'" Combs and Snygg (1959) whose theorizing is closely associated with that of Roger's, discussed concepts of self which they defined as "those more or less discrete perceptions of self which the individual regards as part, or characteristic of his being" (p. 42). The phenomenal self is represented as including "not only a person's physical self but everything he experiences as 'me' at that instant" (p. 44). They argued that we all have thousands of perceptions about ourselves in different situations, and all perceptions of the self a person has at a particular instant are called the "phenomenal" self. What a person thinks and how he behaves are governed almost entirely by the concepts (the self-perceptions) he holds about himself and his abilities at any given time. "The self," they argued, "can only be understood through somebody's perceptions" (p. 123). It follows that the ways in which self can be described are limitless.

From this small but representative sample, it is possible to understand why the study of self is so complex. Ruth Wylie's comments are appropriate:

> The scientific utility of a term such as self is vitiated when various psychologists who employ it do not offer even literary or denotative definitions, let alone operational ones, but instead simply talk about the construct to which they wish to assign the specified label (1968, p. 729).

Self-as-subject definitions admittedly are more obfuscating than are self-as-object definitions, but this observation can console neither educators (who must design educational programs to somehow change the self-concept of children) nor test constructors (who must construct instruments to assess those changes). Eventually, better operational definitions for these concepts must be developed if educators and test constructors are to succeed at their assignments. Very generally, the term "self-concept" refers to a cognitive-conative organization composed of the person's beliefs, attitudes, feelings, perceptions, and evaluations of himself as an object; and that the self-concept, as broadly conceived, is intended to cover and include the total range of one's perceptions and experiences (Creelman, 1954). It will be demonstrated in the next part of this paper that many developers of self-concept tests ignore this conclusion and treat tests (which cover a limited range of perceptions and/or experiences) as a measure of all that is meant by the term. Others, more correctly, regard their measures as assessments of only a limited range or specific area of self-concept.

II. APPROACHES TO THE ASSESSMENT OF SELF-CONCEPT IN CHILDREN

The child, a product of innumerable distinctive social and physical encounters, is truly a unique being. His idioconceptual structures (i.e., those unique conceptions one has about the world and himself as part of that world) and more particularly, his self-concept have been

shaped (and too often buffeted) by those many encounters. Thus, while some of the content of his self-concept is shared universally by others, most is singularly different. In short, no two children are exactly alike, nor can they ever be, and attempts to understand the individual child should reflect this fundamental assumption. How can anyone appreciate fully why any given child behaves as he does? If possible, we should like to get inside of him to examine, in detail, all that which constitutes his self. But, even abetted by the most sophisticated technology available, the observer--the outsider--is physically unable to enter the mind of a child to sense directly his feelings and thoughts. The self or the self-concept, can only be <u>inferred</u> by direct observation of behavior as it emerges or by an examination of the traces of behavior after it has occurred. These two processes are fundamental to all the assessment techniques discussed in this section.

The model displayed in Figure 1, adopted from one offered by Gordon (1968), provides a highly general (though tentative) method of viewing how the child's self may be assessed.

The model indicates that the assessment of self-concept may be approached by the use of any one of five distinctive procedures: direct observations, behavioral traces, self-reports, and projective techniques, or by a combination of these. In turn, these five major assessment categories can be, and have been, further subdivided. (For example, see Table 1, below.) The classification schema finally adopted represents a modification of the systems proposed by Campbell (1963) and Sechrest (1968) for behavioral dispositions and the schema proposed by Lindzey (1961) for projective techniques. The factor system proposed by Cattell

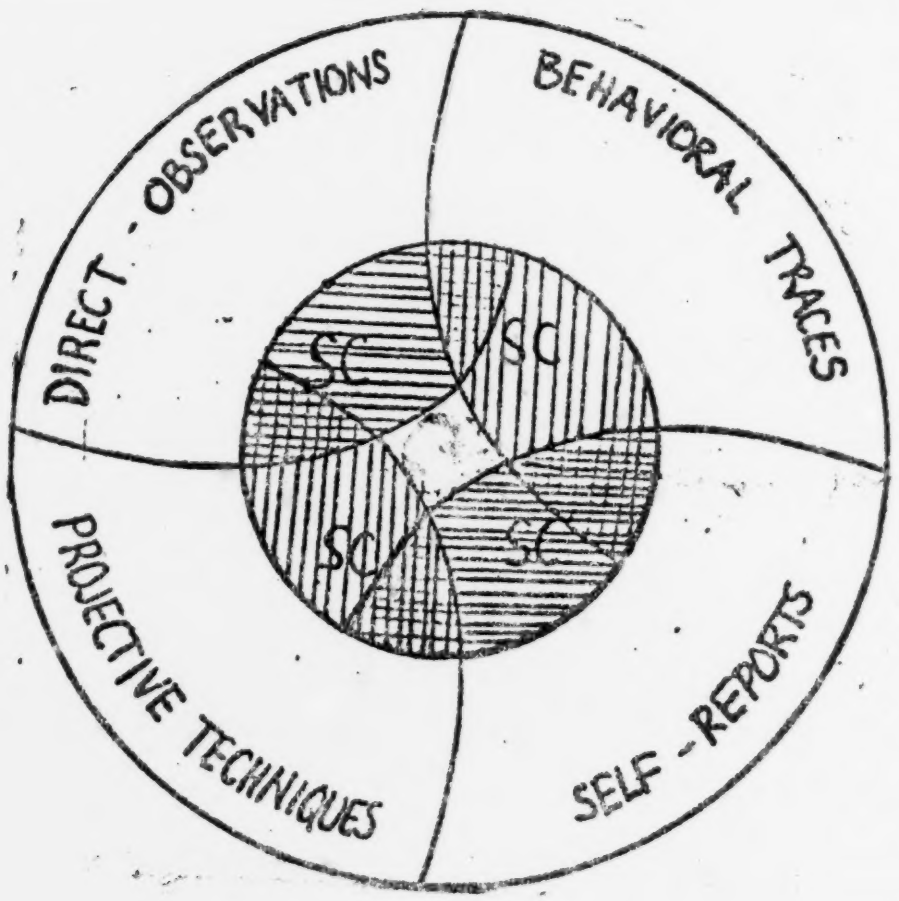

Figure 1

A general model for the assessment of the self

The inner circle represents the organized and differentiated self-concept. The diamond-shaped center represents the self-concept assessed by any combination of the four major procedures: Direct Observation, Behavioral Traces, Self-Reports, and Projective Techniques.

and Warburton (1967) could not easily be employed here. The categorical system selected for this paper should be regarded as suggestive, since it is only one of many ways in which the materials to follow may be classified and described. The present system reflects nothing more than an attempt to provide a means by which an enormous amount of information can be more easily digested by the reader. In the 16 sections which follow most of the currently available self-concept instruments that have been employed to assess the self-concept of children up to and including the third grade are briefly described. Most of the instruments located were still in the developmental form and psychometric data was either not readily accessible or was lacking altogether. While some mention is made in reference to reliability and/or validity this was not the major concern of the paper and is glossed over.[17]

Although no great effort was expended to locate all studies which utilize the described measures, many reports became available and are summarized. Investigations whose foci were more on educational rather than theoretical concerns are covered in this paper.

A. Direct Observational Procedures

A fundamental characteristic of all direct observational procedures is their emphasis upon overt behavior, including expressive or coping behaviors that can be seen, heard, or otherwise perceived by the human or mechanical recorder. Covert behaviors, or the inner mental life of the child (his thoughts, beliefs, perceptions, attitudes, and feelings) are not directly observable and must be inferred from overt behaviors, or assessed by other means; e.g., self-report procedures.

Table 1

A Classification Schema for Self-Concept Assessment Techniques

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A. Direct Observational Procedures

1. Observations in a free field
2. Observations in selected situations
3. Observations in contrived situations

B. Behavioral Trace Procedures

1. Physical tracings
2. Manifest and/or cloaked recollective trace reports

C. Self-Report Procedures

1. Manifest and/or cloaked self-reports
2. Reports on symbolically contrived situations
3. Episodic recall

D. Projective Techniques

1. Cued associations
2. Cued constructions
3. Minimally-induced constructions
4. Completions
5. View of the stimulus through choice and/or ordering
6. Self-expression

E. Combinational Procedures

1. Observer as instrument
2. Subjective-behavioral comparisons

The fact that direct observational techniques relate to the recorder's perception of emergent behaviors and not to his impressions of past behavior serves to distinguish direct observational procedures from behavioral trace procedures.

Direct observational procedures may be concerned with behaviors as they occur either under natural or controlled conditions. Naturalistic observations are concerned mainly with viewing the child in his everyday environs where behavior can unfold naturally and are not influenced or caused by the observer. Two of the techniques described below: observations in a free field and observations in selected situations may be regarded as naturalistic observational techniques. The technique known as observations in contrived situations is a controlled observation technique. In controlled observations the environment is modified by the observer in such a way that behavior of interest to the observer is elicited.

1. Observations in a free field are concerned with situations in which the child moves freely about his environment, unrestricted by the observer. Such behavior is usually assessed by any number of different types of trailing techniques (Campbell, 1963), and also referred to as specimen description techniques (Wright, 1960). These techniques involve following the child and recording, usually in a detailed sequential narration,his predominant modes of response to various situations he encounters. A classic example of trailing techniques is found in One Boy's Day, an attempt by Barker and Wright (1951) to describe the behaviors of a child they and their collaborators followed for an entire day. It is also an interpretive record, because it contains inferences of the apparent meanings that the boy

attaches to his behavior, and to the persons, things, and events that he encounters throughout the day.

The extremely high cost of employing observations in a free field as an approach for the educational assessment of self-concept is a fundamental factor for its infrequent use. Data collection, transcription, and content analysis (required for the scoring of self-concept) all contribute to the overall cost. However, it may be possible to apply inferential techniques (described later under observer as instrument approaches) to more easily interpret such data.

2. Observations in selected situations refers to a class of techniques designed to assess behavior in given situations; e.g., in the classroom. The techniques are typically concerned with selected sets of variables or dimensions of behavior but may also be non-specific. Sampling procedures are often employed in this class of observation procedures. Time sampling as a technique involves the distribution of observations over short, scheduled, and uniform time units. In incident or event sampling, the observer focuses on the occurrence or absence of behaviors of a given class. On-the-spot coding, narration, or both may be employed to collect such data (Wright, 1960). Anecdotal records or diary description methods may also be employed. The most frequently used technique appears to be behavior or trait rating scales that are designed especially to assess only a given set of behavioral dimensions. Measures (e.g., rating scales), which belong in this category and which are designed to assess self-concept, are described below. Also, when available and appropriate, summaries of research studies that have employed the described instruments are included.

The Inferred Self-Concept Judgment Scale (McDaniel, 1967) required observers (usually teachers) to rate students on the degree of occurrence of a set of self-concept related classroom behaviors. Several professional psychologists and educators evaluated, for their relevance to self-concept, 100 statements that consisted of short behavioral descriptions; 37 items were selected for the final version of the instrument. The scale is a 5-point numerical/descriptive rating scale, ranging from "never" to "always." An image analysis of the scale items revealed two factors: self-conformance and self-attitude. In a research study that employed a pre- and posttest design, the teacher of each child involved in the study and the school counselor were asked to independently rate a particular set of children on the items of the Inferred Self-Concept Judgment Scale (ISCJS). The procedure was repeated in 6 months. McDaniel reported that regardless of organismic variables (including race, sex, family size, birth order, and grade level), all low income culturally different children were scored as having a positive self-concept. Anglos revealed a self-concept significantly different from Mexican-Americans but not significantly different from Negroes only in the fifth grade. For all combined groups, the self-concept decreased significantly during the pre- and posttest interval.

A subscale of the Evaluation Scale (Butler, 1965), which may be called the Self-Concept Subscale (developed by Butler, Church, and Swayze), consists of six items. Each item assesses a different aspect of the self; e.g., awareness of self, feeling about self, progress toward self-sufficiency, involvement in task, openness to new experiences, and ability to relate to others. The continuum upon which the observer rates the child is composed of five points.

Points 2 and 4 are described by a sentence or two.

DiLorenzo (1969) described the Teacher Measurement of Pupil Self-Concept, a paired-comparison type rating scale developed by staff of the New York State Education Department, Office of Research and Evaluation. The instrument contains three statements that describe how children see themselves as learners compared to peers, teachers, and classroom materials. The three items are defined by sets of behaviors and characteristics that reflect positive self-concept. After she observes the children for a week, the teacher considers, not her estimate of the child's self-concept, but rather the child's perception of his self-concept. (For example, does the child see himself capable of certain critical behaviors?) Each child is then compared with every other child in the classroom, and judgments are made that concern whether or not one child has a higher self-image than another. A rank order of the children is obtained by this procedure. DiLorenzo reported that scores from this measure were compared with scores from a self-report type procedure, and the correlation coefficient that resulted was significant, but low.

Thus far, none of the three measures described in this section has been validated adequately. For example, no psychometric data were found in the manual that described the Self-Concept Subscale; data collected by McDaniel for the ISCJS were insufficient for a proper evaluation; and, the Teacher Measurement of Pupil Self-Concept was developed primarily to validate another type of instrument (the Learner Self-Concept Test, described below under self-report procedures). Inter-rater reliability (which is always an issue when rating scales

are employed), has not been investigated for any of these instruments. Rating scales will be especially useful to measure self-concept when administered by teachers for the intragroup evaluation of young children whose responses in test situations cannot yet be trusted to reflect reliably the assessed construct. Perhaps some investigators will eventually develop checklist-type observational schedules.

3. Observations in contrived situations refers to techniques designed to assess behaviors in specially designed situations that are intended to elicit responses of interest. All of the techniques discussed in the preceding section may be employed in this situation. However, simple counts, checklists, and rating scales are more typically employed. The boundary between this category and the projective procedure called "self-expression" is sometimes hard to distinguish. In practice, however, observations in contrived situations have been assessed by techniques, that tend to have high face validity, that is, the response(s) required of the child appear(s) natural to the situation. In some instances stooges are employed to help elicit behavior. Generally speaking, the true purpose of the test situation, or experiment, is hidden from the child, and, more often than not, he is not aware that he is observed.

Work Posting, a technique developed by the staff of the Instructional Objective Exchange (1970), employs a rather simple contrived situation. The teacher merely announces the opportunity to post work after a lesson. This measure is based on the assumption that students with a positive self-concept will want to display their work and will not hesitate to do so. On the other hand, a student with a negative

self-concept will not wish to expose his work to possible criticism. Another measure, the Perceived Approval Situation (Instructional Objectives Exchange, 1970), uses a similar approach. For this measure the teacher simply announces that there are a number of students who are doing very well, but she doesn't want to call out their names. She then asks them to come to her after class so that she can speak to them. It is assumed that children with positive self-concepts tend to sense approval of acceptance from authority figures and would therefore expect that the teacher refers to them.

The Doll-Self Test (DST) was developed by Pierce-Jones and Jones (1968) to assess awareness of self. Two dolls, one dark skinned, and the other light skinned, are placed in front of the child. The child is then presented with a series of drawings of parts of the body and is asked to "find another one that looks just like this." The child may either match the body part as presented in the drawing with the appropriate part of his own body or with the appropriate part of the doll's body. Each child receives a single score of "1" in accord with whether he pointed on a majority of trials to himself or to the dolls. The authors argued that "to the extent that external or environmental sensitivity is replaced by sensitivity to self, we might expect greater awareness of self or a more differentiated self concept" (p. 62). In a study that involved the DST, Pierce-Jones and Jones hypothesized that culturally deprived preschool children entering a preschool program would display more sensitivity to the environment or to external stimuli than to themselves, as measured by the DST. They also predicted that, at the end of an enrichment program, children would be more introspective or sensitive

to their own bodies than to external stimuli (the dolls). The results of a pre- and posttest design tended to confirm these hypotheses.

Neither the Work Posting (WP) nor the Perceived Approval Situation (PAS) tests has been validated and there are few data available to assess the DST. The relative simplicity of administration of the WP and PAS tests probably is the factor that makes them attractive, but it is essential to note that test constructors distrust single-item measures. Such objections are easily overcome by constructing similar types of observations in contrived situations, weighting them, and then combining them into a single weighted index of self-concept.

B. Behavioral Trace Procedures

Behavioral trace procedures are mainly concerned with an examination of the trace, residue, or after-effect produced by a child's past responses and not with the direct observation of evolving behavior (Sechrest, 1968). It is in this respect that such measures may be treated as unobtrusive or nonreactive measures (Webb, Campbell, Schwartz, and Sechrest, 1966). We can consider two major classes of behavioral trace procedures: physical and recollective. Physical tracings refer to a class of techniques that entails the examination of changes in physical matter, either caused by the child himself (e.g., the non-examiner-induced doodle), or caused by others as a matter of procedure (e.g., comments on cumulative record cards). Recollective trace reports are techniques employed to examine the memories or impressions that others have of the child and particularly the child's behavior. Sechrest (1968) suggested that there are certain dangers in inferring behavioral dispositions from behavioral traces rather than from direct observations.

First, it is not always certain what behavior is reflected by the trace, and second, memories are notoriously faulty.

1. Physical tracings as measurement approaches may be divided into two major types: erosion measures and accretion measures. Erosion measures reflect the selective wear on materials; e.g., wear on erasers, clothes, and books. Accretion measures refer to an examination of deposited materials. Drawings, stories, and especially information on report cards; i.e., the running record, can be treated as accumulations of data that could conceivably be employed as a rough index of self-concept.

Nimnicht (1970), for example, suggested that if the program he proposed "is successful in producing a better environment to help children develop or maintain a healthy self-concept, children in the program will: (1) attend school more frequently, [and] (2) be tardy less frequently" (p. 6). Both of these measures obviously can be garnered easily and reliably from record cards or from direct observation procedures (though the latter approach probably would not be as accurate as the former).

If it is assumed that classroom rewards; e.g., stars, tokens, or high marks on tests are perceived by the child to indicate that "teacher likes him," then counts of accumulated rewards also may be employed as a rough index of self-concept.

In general, however, such measures do not appear to be especially useful. In many situations they probably could not discriminate well among some children, who, if assessed by other means, might show

measurably different self-concepts. However, it is interesting to speculate whether some weighted combination of physical tracings and observations in contrived situations might not produce a more valid and reliable index of self-concept than each measure taken singly.

2. Manifest and/or cloaked recollective trace reports refer to a set of techniques that requires the respondent (a teacher, parent, peer) to search through his memory of a particular child and to report on that child's behavior.[18] Such reports may be based on explicit memories or upon vague impressions. The purpose of the report need not be perfectly clear to the respondent. Most techniques that employ the manifest and/or cloaked recollective trace reports approach involve interviewing or rating methods.

The Rating Scale for Measuring a Child's Self-Concept (FitzGibbon, 1970) required the teacher to rate each child for nine psychosocial factor areas along a 5-point scale that ranges from "high" to "low." The factor areas are defined in terms of observable behaviors, but teachers are not asked to observe their students, only to rate them. This measure was developed as a companion measure to the Responsive Self-Concept Test (FitzGibbon, 1970) which is described in more detail in another section.

Though still in the early stages of development, the Parents' Report on Children's Behavior, a subsection of the Parent Kindergarten Evaluation Form (Coller, 1970), contains a cluster of items designed to assess self-concept via the manifest and/or cloaked recollective trace reports approach. Sometime after the onset of educational intervention, parents are asked to rate their children by a variety of dimensions using modified and unmodified adjectives. Parents indicate for each

dimension if and in what direction they think their children have changed. In this respect alone, they are forced to employ behavioral traces. They are also asked to determine whether those behavioral changes on each of the dimensions was because of events that happened to him at school, at home, or just in the course of growing up. Some of the items related to the self-concept cluster consist of behavior dimensions that may be observed by the parent as the child interacts with adults or peers; other dimensions must be inferred; and still others reflect the parent's attitudes towards their children more than the behavior of their children. This latter set of items was included on the assumption that children will grasp their parents' attitudes towards them and will tend to incorporate such attitudes as part of their own self-concepts. In a study that employed the Parents' Report on Children's Behavior, Coller found that parents generally perceived the evaluated kindergarten program as a contributing factor to the positive change in their children's self-regard.

Neither of the measures described in this section has been validated adequately. The Rating Scale for Measuring a Child's Self-Concept was developed to help validate a different type of instrument, and the Parents' Report of Children's Behavior (PROCB) requires extensive revision and standardization in order to reach its potential. The PROCB, however, is the only measure encountered that employs an outside agent (a parent in this case) to gather information about the child's self-concept. Data gathered in this manner may prove useful as a means of evaluating educational programs and as a check against

the ratings by others. Discrepant scores, which do not indicate a psychometric problem, may reflect needed program changes.

C. Self-Report Procedures

Unlike other organisms, people have the ability to stand apart from themselves psychically to observe themselves in the act of behaving. Thus, they have the potential to determine why they behaved as they did, and they can estimate how they typically behave. Also, they can predict with some accuracy how they might behave in the future. Perhaps, more importantly, people have a unique talent: to relate to others their feelings, thoughts, and experiences; their idioconceptual structures. To learn something about a child's self-concept, the examiner need not wait for behavior to emerge, instead, he may ask the child to describe himself or to report on behaviors that especially interest him. This is, of course, a simplistic assessment notion when one deals with the very young child, but it is extremely useful when one assesses the self-concept of older children.

Instruments that require the respondents to recount their past behavior or to make judgments concerning their selves or their behaviors generally are referred to as self-report measures. It should surprise no one that self-report procedures represent the most common class of techniques employed in the assessment of the self-concept. It is possible to distinguish between three types of self-report techniques: manifest and/or cloaked self-reports, reports on symbolically contrived situations, and episodic recall. The first two approaches, essentially identical, are treated separately because (1) test constructors have developed a greater proportion of measures of the reports on symbolically contrived situations than of any other single type of self-report

measure, and (2) reports on symbolically contrived situations are easily confused with certain projective techniques. This type of self-report approach is highlighted to make the reader more aware of this classification problem. Episodic recall is seldom employed in a systematic fashion but is probably an everyday technique applied by parents as well as teachers. In a minor way this approach probably aids the teacher to form basic impressions of the child.

Most self-report measures are of the psychometric variety: personality inventories or checklists, Q-sorts, semantic differentials, and rating and ranking scales of all types have been used. In addition, questionnaires, interviews, and autobiographical techniques may be employed to collect data.

1. Manifest and/or cloaked self-reports refer to a class of instruments that range from self-reports whose testing objectives are not disguised to self-reports whose testing objectives are either intentionally or psychometrically disguised.[19] In general, manifest self-report instruments assess aspects of the self that they appear to assess, while cloaked self-report instruments assess dispositions only indirectly related to the particular stimulus situation to which the child responds. The distinctions between manifest and cloaked self-reports become cloudy when respondents can discern only some of the testing objectives. In such instances, the assignments of instruments to either of these subcategories is somewhat arbitrary.

The Brown-IDS Self-Concept Referents Test (Brown, 1966) and the Thomas Self-Concept Values Test (Thomas, 1969) are similar instruments of the manifest self-report variety: each employs essentially the same testing format. The child is photographed, and when he sees the picture, responds to an orally defined bipolar alternate-choice

scale (i.e., he answers questions asked by the examiner: "Is Johnny Gallagher happy or sad?"). Four different referents are used: (1) the child as he sees himself, (2) the child as he sees his mother seeing him, (3) as he sees his teacher seeing him, and (4) as he sees other kids seeing him. Authors of these instruments recommend that the younger child (the preschooler and kindergartener) should be tested over two sessions. These two tests differ in the number and type of items in their scoring procedures. The Brown-IDS Self-Concept Referents Test (BIDSSCRT) provides the user with a self-as-subject score,[20] a self-as-object score, and scores for each of the four referents taken singly. The Thomas Self-Concept Values Test (TSCVT) provides scores for the four referents, a total self-concept score, and a profile in respect to the value (item) dimension.

Brown (1966) and other white examiners[21] administered the BIDSSCRT to three independent samples of 4-year-olds in New York City. Two of the samples were composed of young black children from low socioeconomic status (SES) families. Sample I children attended an enriched preschool program conducted by the Institute for Developmental Studies. Sample II children were enrolled in a day care center. Sample III was composed of children from white upper-middle SES families. The results indicated that the two samples of lower SES black Ss did not substantially differ from one another. However, black Ss obtained scores that were significantly lower than those received by white Ss. Brown interpreted his results to mean that the black children tended to perceive themselves in less positive ways than did white children. Black children, in comparison to white children, more readily imagined

that significant others (especially their teachers) saw them less positively.[22] Thomas (1969) likewise investigated the SES variable and found the TSCVT able to differentiate between highly privileged and underprivileged groups. In general, members of the highly privileged group perceived themselves more positively than members of the underprivileged group. Thomas also found some low but significant correlational coefficients when various self-concept scores were compared to demographic variables, such as: number of siblings, amount of father's education, and child's age. The more brothers and sisters the child had, the lower his concept of himself. The higher the educational level of the father, the more positive did the child see his teacher's and peers' perceptions of him (the child) to be. The older child is more likely to see his mother's perception of him to be more positive.

The recently revised Illinois Index of Self-Derogation (Meyerowitz, 1962) and the Children's Self-Concept Index (Helms, Holthouse, Granger, Cicarelli, and Cooper, 1968)[23] (which was used for the controversial Westinghouse Ohio University Head Start study) are similar instruments. The latter is a modified version of an early version of the former. Both tests may be administered to small groups (about five children), and both essentially employ the same test format. Children are shown predrawn, paired, human-like stick figures (one holding a balloon, and one holding a flag). The examiner ascribes certain characteristics to the figures; for example,he says, "the balloon-child is learning a lot in school, the flag-child isn't learning very much." For each item, the child is asked to indicate which of the

stick-figures is most like him. The overall score focuses upon the tendency towards self-derogation or the selection of socially undesirable responses. These measures appear to measure the self-re-peer acceptance, home, school, and self-regard. The Meyerowitz-Westinghouse approach, the format of which may be characterized as an orally defined graphic (or picture-type) alternate-choice scale, differs from the Brown-Thomas approach. In the Meyerowitz-Westinghouse approach, the child responds, not directly to verbal statements, but indirectly to the stick figures, which are but representations: signs of the statements. It is this feature that permits the individual testing of children in group settings.

Meyerowitz (1962) tested the self-concepts of educable mentally handicapped (EMH) children with Form 1 of the Illinois Index of Self-Derogation (IISD). One hundred and twenty first grade children (of 1807 tested) were designated as EMH. Through randomization, 60 children were assigned to special classes, while the remainder were left in their regular classes. An SES matched criterion group of normal first graders also was selected. The findings after a year of schooling indicated that (1) EMH children ascribed to themselves significantly more socially undesirable responses than did normal children, and (2) EMH children assigned to special classes ascribed significantly more derogations to themselves than the EMH children who remained in their regular class. In a follow-up study (Meyerowitz, 1969) Form 2 of the IISD was administered at the beginning of the second school year. No significant difference in the number of self-derogations made was found among the three groups. Form 3 (a further minor revision of the IISD) was administered at the end of

the second school year. At this time, EMH children in special classes accepted significantly more self-derogation than did either of the other groups. Meyerowitz claimed that special class placement for the EMH cannot be justified in terms of their mental health. The results of the overall analysis of the Children's Self-Concept Index (Cicarelli, 1969), employed in the Westinghouse-Ohio University Head Start investigations, revealed that Head Start children from either summer or full-year programs did not score significantly higher than control populations at any of the three grade levels studied. In the subgroup analysis, Head Start first grade groups in the mainly Negro centers had a higher self-concept than controls. The reverse was true of grade 2 children. There were no significant differences at grade 3.

The Faces Scale, developed by J. R. Frymier and reported in Beatty (1969), like the Meyerowitz-Westinghouse approach, is an orally defined graphic (picture-type), alternate-choice scale. However, instead of stick figures, the child is presented with identical sets of happy and sad faces. The examiner asks the child to indicate how he feels about a particular situation by placing an X through the face which shows his feelings. The overall self-concept score obtained for this measure purportedly is designed to assess the child's attitude towards school. To some degree attitudes concerning physical development, home life, new experiences, and social relationships are assessed by this instrument. Jacobs and Felix (1967) reported results related to a modified version of the Faces Scale (as developed by Frymier). The test was administered to samples of second graders who attended either urban or suburban schools. Comparisons of total

test scores failed to reveal any significant differences in self-concept between these groups. The Self-Concept and Motivation Inventory (Farrah, Milchus, and Reitz, 1968) and a measure known as When Do I Smile? developed at the American Institutes for Research and reported by Dysinger (1970) also make use of faces for response purposes. These instruments differ from the Faces Scale, since more than two faces are employed to define points along the scale. The expressions on the faces vary from very happy to very sad. Such scales are referred to as graphic (picture-type), multiple-choice scales. Dysinger administered the When Do I Smile? scale to elementary school children (grades 1-5) in the fall and spring sessions of the school year. The resulting change or difference scores were analyzed by grade and by classroom ratings in respect to judged teacher performance. The relationship between classroom rating and self-concept score change was not found to be statistically significant for the combined grade levels. Another analysis that failed to reach significance involved judges who identified students whom they felt made progress in improving their self-concepts. A similar measure of the nonpicture-type variety of graphic scales called How Much Like Me? being developed at the American Institutes for Research,[24] employs circles varying in size instead of faces. In addition, this instrument is intended for children of reading age. The Self-Concept and Motivation Inventory, discussed above, has been factorially designed and divides self-concept into scores for role expectation and self-adequacy. Scores for eight factors are obtained. When Do I Smile? is essentially designed to assess changes in the child's feeling towards school. Some questions deal with social activities. An overall score is obtained for this

measure as well as the How Much Like Me? test, which assesses self-concept in general. Another type of graphic, multiple-choice rating scale is found in a measure called the Where Are You Game (Engel and Raine, 1963). This technique employs a scale in the form of a vertical ladder upon which stick figures (described by the examiner with opposing statements) were drawn above the upper and below the lower rungs. The children were asked to place a mark on the ladder where they think they are in relation to the two stick figures. An overall score that encompasses four or five factor dimensions is calculated for this test which purports to measure global self-concept.

The Parental Approval Index, developed by staff of the Instructional Objectives Exchange (1970), is an example of a multiple point descriptive rating scale. In this instance the scale runs from "love me" to "hate me." The child is asked to place himself in fictitious situations in which he behaves in certain ways. He is then requested to indicate how his mother would feel about the way he behaved and how she would feel about "you as a person." This index is designed to assess the extent to which a child views himself as unconditionally accepted by his mother. Gordon's How I See Myself scale (Gordon, 1968), intended for readers, is a numerical descriptive multiple-choice rating scale. The instructions, statements, and scales are printed for each respondent to read and respond to by himself usually in a group setting. A factor analysis produced the following factor structure: teacher-school, physical appearance, interpersonal adequacy, autonomy, and academic adequacy.

The Self-Concept as a Learner Scale-Elementary (SCALE) reported in Beatty (1969) (but constructed by J. K. Fisher) and the Self-Concept

Instrument: A Learner Scale (Liddle, 1967) (both modifications of a scale developed by Walter Waetjin) are examples of true-false or yes-no type self-report instruments. Children judge whether or not statements are true for them by indicating "yes" or "no." Both are designed to assess the self re learning. SCALE assesses four factors: motivation, task orientation, problem solving, and class membership. The Piers-Harris Children's Self-Concept Scale (Piers and Harris, 1964) is similar to these two measures. While an overall score is employed, a factor analysis produced the following factor structure: behavior, intellectual and school status, physical appearance, anxiety, popularity, and happiness and satisfaction. Piers (1969) provides the user with instructions to develop cluster scores. The Self Appraisal Inventory Primary Level, developed by the IOX staff--The Instructional Objectives Exchange (1970), assesses four aspects of the self-concept: general, family, peer, and scholastic. Two other measures developed at IOX, the Class Play (Instructional Objectives Exchange, 1970) and Television Actors (Instructional Objectives Exchange, 1970) also employ the yes-no format. Both ask the child to pretend that he may be selected to assume a role (either in a class play or in a television show). In the Class Play instructors request the child to indicate the acting roles (from a selected set) his teacher and members of his family would choose for him to undertake. The total number of "yes" responses to favorable roles is counted. It is assumed that an individual who has a positive self-concept will perceive that others would likely cast him in roles which project a positive image. The instructions for Television Actors direct the child to indicate which roles he would be willing to assume. The number of roles the child would be willing to play is counted. The assumption

for this measure is that the child who possesses a positive self-concept would be willing to portray a wider variety of roles than a child with a less positive self-concept.

The Responsive Self-Concept Test (FitzGibbon, 1970) requires the child to determine if the examiner is talking about the respondent (the child), about someone the respondent knows, or about someone the respondent does not know. A photograph of the child is pasted on a card between two other pictures which are defined for the child as "someone he knows" and "someone he doesn't know." Nine psychosocial factor areas are assessed: self-awareness, emotional effect, relationship with family, peer relationship, verbal participation, approach to learning, reaction to success/failure, self-satisfaction, and level of aspiration.

Another instrument, the Global and Specific Self-Concept Scale-Primary (Stillwell, 1965), is based upon the measurement concepts of the semantic differential. The bipolar adjectives selected for inclusion were chosen not only on the basis of high factor loadings for evaluation, potency, and activity, but also on the basis of face validity. The adjectives appeared to have a relationship to the concepts chosen for rating. This particular measure differs from the typical semantic differential, since points along the continuum are narratively described rather than indicated by numerical or other graphic characters. It may be used to assess global self-concept; i.e., "myself" or specific role self-concept, including "myself as a student," "myself as a reader," or "myself as my parents see me." An overall score is used, but relational scores may also be obtained.

Normally conceived interview techniques are represented by the Self-Concept Interview developed by FitzGibbon and Nimnicht (undated). The interview is partly unstructured; that is, the initial part, which requires the child to talk about a picture of a child entering a school building, is unstructured. The structured questions, which follow after rapport is established, are designed to assess the self-concept of the child re school. Individual questions attempt to tap the child's perception of his cognitive skills and his ego resources; i.e., motivation, interest, and social maturity that are reflected in classroom decorum, promptness, compliant attitude, and interaction with peers. Varying scores, 2 to 0, are assigned on the basis of the quality of response; i.e., from enthusiastic to negative responses. In a study of kindergarten children, FitzGibbon and Nimnicht compared sex and three levels of school social class in relation to self-concept measured by the Self-Concept Interview. Interaction effects indicated that there was a significant difference between the self-concepts of boys and girls in lower and middle class schools, but not in the upper class school. Lower class boys had poorer self-concepts than lower class girls; the reverse is true of children in middle class schools.

While none of the measures described in this section have been validated sufficiently, there are several instruments which have been or are being administered to large samples under diverse conditions. The following instruments are examples: Brown-IDS Self-Concept Referents Test, Thomas Self-Concept Values Test, Illinois Index of Self-Derogation, Children's Self-Concept Index, and the Piers-Harris Children's Self-Concept Scale. The Self-Concept and Motivation Inventory and the How

I See Myself scale have not been sufficiently validated with younger children, but they have been used extensively with older children in fourth grade and higher grades.

2. Reports on symbolically contrived situations refer to a class of instruments, close variants of manifest and/or cloaked self-report techniques, which employ pictorial or other graphic symbols to depict characteristics and/or behavior dispositions the child might be expected to display in real life situations. To differentiate reports on symbolically contrived situations from projective procedures, it is essential for the depicted characteristics and behavior disposition either to be described in detail by the examiner or to be portrayed unambiguously. (If the latter approach is used, the test constructor should collect data concerning the face validity of the instrument.) Conversely, if the situations are vague in theme and incomplete in content, they should be treated as projective measures (Symonds, 1946).

In the Preschool Self-Concept Picture Test (Woolner, 1966), children are required to select from two pictures the drawing (of a child) which is "like themselves" and "the one they would like to be." Characteristics (clean-dirty) and behavioral dispositions (sharing-not sharing) are displayed but not described by the examiner. In a face validity study the children's descriptions of the plates agreed with the test designer's descriptions. The measure provides several scores for self and ideal-self that are then compared with each other to provide a measure of the degree of congruence; the dissatisfaction with self score. As reported in Boger and Knight (1969), the Preschool Self-Concept Picture Test was administered to a group of emotionally

healthy preschool children and a group of emotionally disturbed preschoolers. Results indicated that these two groups of children viewed themselves differently: Healthy children perceived themselves to possess more positive characteristics than disturbed children. Congruence between self and ideal self-concept was 80% to 100% in the emotionally healthy group but only between 00% and 20% in the disturbed group.

The Learner Self-Concept Test, developed by the New York State Education Department, Office of Research and Evaluation and described by DiLorenzo (1969), is composed of sets of one or two drawings, each of which represents a particular classroom situation. The situations were designed to reflect, in part, the kinds of behavior that prekindergarten children with positive self-concepts might see themselves doing. For example, the child perceives that he is able to perform large motor activities well. The classroom situations depicted, including the thoughts and/or behavior of at least two of the children in the drawings, are described by the examiner. The respondent is asked to select either the positive or the negative character depicted in the drawing who is most like him. The self re the learning situation; that is, relationships with peers, teachers, and classroom materials are assessed by this measure. DiLorenzo summarized data collected from experimental and control children in nine preschool classes over a 3-year period. He reported that neither traditional nor cognitive-oriented programs effectively altered self-concept in the total population. The programs were not successful with any subgroup by race or sex. In general, nondisadvantaged children had higher self-concept scores than did disadvantaged children. White

disadvantaged children also had more positive self-concepts than black disadvantaged children.

The examiner also describes the characteristics and/or behaviors of children displayed in pairs of drawings in the Self-Concept Instrument (Moellenberg, 1967). Each pair of pictures represents opposite extremes of a particular aspect of self-concept. Children are directed to mark the picture from each set which "is most like them." On a second administration the children mark the picture which "is the best way to be." Moellenberg reported (1) sex differences, and (2) that children who attend schools in middle class neighborhoods exhibit more desirable ideal self-concepts than children who attend schools in lower class neighborhoods.

The Faces (Scott and Jeffress, 1969) should not be confused with Faces Scale. The Faces is designed to assess the attitudes of children relevant to the school situation and focuses upon four major areas: child-home, child-peer group, child-authority, and child-school. Stick figures are employed to represent people in various transactional situations and are depicted without expression. The face of one figure is blank. The depicted situations are briefly described to the child, who must choose from among five stick-on faces that range from "very happy" to "very sad." The child places the chosen stick-on face upon the one blank face in the depicted situation.

The Pictorial Self-Concept Scale (Bolea, Felker, and Barnes, 1970) first requires the child to decide whether the central figure (always a child with a star on his shirt) in a set of cartoons is like him, not like him, or sometimes like him, and then he places the cartoon in one of three indicated piles. Judges were employed (1) to determine if

each of Jersild's (1952) categories (what children said they liked and disliked about themselves) was represented by the cartoons, and (2) to rank the cartoons according to which items would be most important to a child's self-concept on a positive to negative continuum. Scoring was based on the placement of the cartoon and the weighted value of the cartoon. Bolea, et. al. summarized several studies that employed the Pictorial Self-Concept Scale (PSC). Ninety-one percent of a sample of black first graders had both a negative self-concept and a distorted race image (Storm, 1968). A high self-concept group was less restricted in their drawing when compared to a low self-concept group (Sun, 1969). The hypothesis that students who have perceptual impairment (as measured by the Frostig Test of Visual Perception) will also have negative self-concepts was supported (Desrosiers, 1968). Vols (1968) found that increases in self-concept scores were associated with increased differentiation in the drawings of self-portraits by children.

The Children's Projective Pictures of Self-Concept (CPPSC),[25] developed by McNamara, Porterfield, Miller and Arnold (1968), directs children to choose, from each situation presented, the pictured child who is doing what they would do. An overall score is produced that may be used to assess general self-concept. Judges were employed to weight the choices in terms of adequacy of self-concept. This test, with the exception of the first plate, is similar to the Pictorial Self-Concept Scale. The depicted situations are not described by the examiner, and test-age children have not been employed to determine if the pictures truly depict what the test constructors intend the children to perceive. However, in both tests artists received specific instructions on the

concrete situations the drawings should depict, so it is assumed that ambiguity was not intended and that these tests should be classified as self-report techniques rather than as projective measures. McNamara, et. al. reported that significant gains in self-concept scores were made in a pre- and posttest evaluation of children enrolled in a Head Start program. In a similar study that involved the CPPSC, Porterfield, Ukller, and Arnold (1969) reported that significant gains in self-concept scores were again found.

Again it must be reported that no instruments in this section have been validated sufficiently. The Pictorial Self-Concept Scale and the Preschool Self-Concept Picture Test appear to have been used more frequently than the others. In general, measures of the reports on symbolically contrived situations variety seem to be especially useful to assess the self-concept of the younger child, and should be further investiaged.

3. Episodic recall refers to techniques that require the child to recount (with emphasis on his behavior) some of the events that transpired and involved him either during that day or at an earlier time. Sechrest (1968) indicated that this technique is not frequently used in personality assessment. However, for obvious reasons, parents rely heavily upon this technique. Teachers also employ the technique in an unsystematic fashion. There does not seem to be any currently available standardized technique designed to elicit episodic recall data from children enrolled in early childhood educational programs. For obvious reasons, episodic recall instruments, for this age group, and especially for the very young, must be limited to the interview variety rather than to the written autobiographical type.

D. Projective Techniques

Lindzey (1961) differentiated between two important meanings of projection: classic and generalized. Classic projection, typically assumed to be Freud's meaning of projection, refers to the process of ascribing one's own unacceptable impulses or qualities to other individuals or objects in the outer world. It is generally believed that this is an unconscious and pathological process. On the other hand, generalized projection, refers to a normal process in which the perceptions and interpretations of the outer world are influenced by the individual's inner cognitive emotional states. It is this second meaning of projection that Lindzey argued "would embrace virtually all of the tests that are commonly considered to be projective devices" (p. 38). [Italics ours] Projective techniques differ from self-report procedures, since the former are concerned with unconscious processes, while the latter are usually designed to assess conscious attitudes, thoughts, and feelings. What are the characteristics of tests that are to be classified as projective techniques? At the present time there is no satisfactory answer to this question. Perhaps Lindzey's characterization of projective techniques comes closest to an acceptable answer:

> A projective technique is an instrument that is considered especially sensitive to covert or unconscious aspects of behavior, it permits or encourages a wide variety of subject responses, is highly multidimensional, and it makes unusually rich or profuse response data with a minimum of subject awareness concerning the purpose of the test. Further it is very often true that the stimulus material presented by the projective test is ambiguous, the test evokes fantasy responses, and there are no correct or incorrect responses to the test (p. 45).

Examination of the six categories of projective procedures described below will reveal that this characterization does not hold for all measures. The six different projective techniques are called

"cued associations," "cued constructions," minimally-induced constructions," "completions," "view of the stimulus through choice and/or ordering," and "self-expression." When we ask the child to respond to a stimulus situation with the first word, image, or percept that occurs to him, the child is said to be "associating." When the child creates a product (not necessarily a material product), he is "constructing," but when the examiner is more concerned with the manner or style by which the product is created, the child is said to be engaged in "self-expression." (Self-expression measures are variants of direct observation procedures.) When the child is presented with some type of incomplete product and asked to complete it, the child responds to a completions-type measure. Finally, when the child orders or chooses from among a set of ambiguous stimuli, the child responds to a type of assessment approach called: view of the stimulus through choice and/or ordering. There are two major types of construction techniques: those in which the stimulus situations are thought to cue a specific content-range of responses, and those in which the stimulus situations limit only the mode of response.

1. Cued associations represent techniques that instruct the child to respond to complex stimulus situations with the first word, image, or percept that occurs to him (Lindzey, 1961). The stimuli may be verbal as in the case of word association tests or symbolic as in the case of ink blot tests. Halpern (1960) discussed how the Rorschach Test may be used to assess the self-concept of the young child. The Rorschach consists of a set of ink blots to which the child is asked to associate--to respond immediately with the first ideas that come to him. The results of testing with the Rorschach usually provides

one with qualitative information concerned with the adjustment of the child rather than with the descriptive details of his self-concept. Administration techniques used in the assessment of children differ slightly from those for adults. And since the interpretation of the Rorschach requires the services of experts this is an unlikely test for educational assessment.

2. Cued constructions refer to those instruments that require the child to create or construct a product in response to complex stimulus situations. The stimulus situations are thought to cue responses of a specifiable content area. The Blacky Pictures (Blum, 1950), for example, is composed of a set of animal pictures, each assumed to be related to a specific area of psychosexual development: oral eroticism, oral sadism, oedipal intensity, etc. The focus of cued constructions instruments is on the end-product itself and not on the behavior of the child as he constructs the product. Typical responses, such as storytelling, drawing, or rearranging stimuli, are considered to be more complex than those called for by the association-type measures (Lindzey, 1961).

Bellak and Adelman (1960) assumed that the child's "self-image" is revealed in the stories children tell when the Children's Apperception Test (Bellak and Bellak, 1950) is administered. The CAT, as this instrument is more commonly known, consists of a set of animal pictures that display a variety of characteristics and behaviors. Children are asked to tell a story about the pictures--to describe what the animals are doing. The Make-A-Picture Story Test (Schneidman, 1949) may also

be employed to assess self-concept. The MAPS test, as this test is called, is a variation of the thematic apperception type tests. The backgrounds and figures of the MAPS are separated, and the child is faced with the task of selecting one or more cut-out human-like figures, populating the background picture, and then telling a story about the stimulus situation he has helped to create (Schneidman, 1960). The unstructured part of the Self-Concept Interview, developed by FitzGibbon and Nimnicht (undated) and described in the self-report section, may also be assigned to this category.

Another type of measure, the Measurement of Self-Concept in Kindergarten Children (Levin and Lafferty, 1967) requires children to draw pictures. Some of the pictures are drawn after the children have listened to a story, looked as a cartoon, or seen a movie; other drawings are drawn without these conditions present.

With the single exception of the Measurement of Self-Concept in Kindergarten Children, these measures are not often employed to assess self-concept. They require considerable time for administration and skilled personnel for interpretation.

3. Minimally-induced constructions and cued constructions require the child to construct a response. However, they differ in the type of eliciting stimulus (the stimulus situation employed to induce the response). Minimally-induced constructions use only simple instruction and occasional malleable materials to narrow the content-range of the response. The examples that follow represent a few of the instructions that might be possible for techniques in this category: "draw a person," "tell a story about school," "make your own face out of paper mâché."

Drawing instructions are the most popular form of this projective procedure. For discussions of human figure drawings see Machover (1960) and Koppitz (1968).

The scoring system for the Make-A-Boy (Girl) portion of the Riley Preschool Developmental Screening Inventory (Riley, 1969), a variation of the Goodenough-Harris Drawing Test, (Harris, 1963) and the Draw-A-Person Test (Machover, 1948) represents but one way in which the self-concept of children may be assessed through the analysis of drawings they make of persons. Riley's system employs both a quantitative (inclusion of parts of the body) and a qualitative analysis. Harris (1963) admits that the "case for unconscious representation of the 'self' in human figure drawing has not been firmly established" (p. 46). However, he does argue that child self-portraits, when such are explicitly requested (instead of requesting a person, boy, girl, etc.), do portray the drawer's appearance; his self-image. In a pre- and posttest design the Goodenough-Harris Draw-A-Man Test was administered to experimental and control Head Start children. Crovetto, Fischer, and Boudreaux (1967) reported that the experimental group showed gains on this measure but the control group did not. In a follow-up study Crovetto, Fischer, and Boudreaux (1968) reported that posttest comparisons between the experimental class and the control class revealed a significant difference on the Draw-A-Man Test. Studies that utilize the Goodenough-Harris Drawing Test to detect maladjustment in kindergarten children and to measure self-concept have been reported by Vane and Eiser (1962) and Vane and Kessler (1964). Signs (such as no body, arms, or mouth), and grotesque drawings were employed as indicators of

maladjustment in children at the third grade level.

Hulse (1951) employed the Family Drawing Test to assess the self-concept of children and their perception of their role in the family. The size and placement of the self figure as well as other indicators are used in the assessment.

The HTP-Cincinnati Self-Concept Index reported in Jacobs and Felix (1967) represents another procedure to arrive at a measure of the child's self-concept through the analysis of drawings. In this instance the House-Tree-Person Test (HTP) is employed as a means to elicit the drawings. The Cincinnati scoring system is composed of eight factors which the examiner rates for presence on a three-point scale. In a study that involved urban and suburban children by grades, Jacobs and Felix reported a grade difference with children in higher grades obtaining the higher scores. No within-grade effect because of the location of school was observed, however. Readers will find additional information related to the HTP test in Hammer (1960).

The drawing measures discussed in this section appear to be popular ways of assessing self-concept. Certainly the data are easily obtained. Caution should be exercised, however, since these measures still have not been validated sufficiently. Like most of the previously discussed projective measures, these measures also provide mainly qualitative rather than quantitative evaluations.

4. Completions. Measures that may be categorized as completions include those in which the child is presented with an incomplete product that he is required to complete. Within the limits of the situation, the child may complete the stimulus materials in any manner he wishes. Such tests differ from cued associations since completions

require constructed responses that are more complex. Sentence completion techniques, which are among the most well known tests in this category, usually require written responses and therefore cannot be administered easily to the young child. Drawing completion techniques are more effectively administered to the young child.

The Symbol Elaboration Test reported by Krout (1950) is a drawing completion technique which requires the child to finish stimulus patterns that are assumed to represent a variety of attitudes and relationships among which is the factor of self-concept. Completions, however, seldom are used in the educational assessment of self-concept.

5. View of the stimulus through choice and/or ordering. Because of their formats and the types of response required of the child, the view of the stimulus through choice and/or ordering techniques come closest to the self-report or psychometric methods described earlier. There are at least two criteria that may be employed, either separately or conjunctively, to distinguish between self-report methods and projective techniques of the choice or ordering variety. For example, the stimulus situation may be ambiguous. More frequently, the elicited response represents a highly personal inferential value judgment and thus defies absolute external validification; e.g., choosing the "good" child in a picture. In essence, the child is typically asked to choose from a limited number of alternatives the item(s) or arrangement that fits some specified criterion such as correctness, goodness, relevance, attractiveness, or likeability (Lindzey, 1961).

The Creelman Self-Conceptions Test (Creelman, 1954) is a projective technique which requires a choice response from the child. Presented with

a set of plates containing relatively ambiguous drawings that depict a variety of interpersonal situations, children are asked to choose from each plate the picture they "like best" and the one that "they do not like." Then, from the same set of plates, the children are asked to select the picture they think is "good" and the one that is "bad." Finally, children are requested to indicate which of the pictures is "most like you" and which is "most different from you." The format for this instrument may be described as a picture-type multiple-choice test that requires multiple responses. From an analysis of "choice coincidence," it is possible to derive combination scores that indicate self-acceptance, self-rejection, self-evaluation, and the acceptance and rejection of moral or social standards perceived by the child. Creelman administered her test to children of three different age levels. Age trends and sex differences were found. In general, lower self-acceptance and self-evaluations were found at the younger ages. Boys had higher self-concepts than girls.

Form C of the Criticalness of Self and Other Persons Test, reported by Cattell and Warburton (1967), employs a yes-no format in response to questions asked about a picture of an unknown child. The test assesses (1) awareness of characteristics, (2) degree of criticalness, and (3) degree of appreciation of self and others.

The Animal Picture Q-Sort, developed by J. E. Riley and reported in Beatty (1969), is an example of a projective technique which requires an ordering response from the child. The Q-Sort was designed to measure the sense of adequacy in children's sex roles. The child is required to sort animal pictures into a forced normal distribution that ranges

from "like me" to "unlike me." The scoring system is quite complex and requires a good deal of statistical knowledge. The Self-Acceptance Test reported by Cattell and Warburton (1967) requires the child to sort into two piles pictures of human beings and animals either "like himself" or "not like himself." It is theorized that narcissistic children would choose more pictures like themselves.

The Children's Self-Social Constructs Tests (Long, Henderson, and Zeller, 1967) is a projective technique which requires both choice and ordering responses on the part of the child. Children are presented with a booklet that contains a series of symbolic arrays in which circles and other figures represent the self and/or other persons of importance. The child is required to arrange these symbols by selecting a circle to represent the self or some other person from among those presented, by drawing a circle to stand for himself or another, or by pasting a gummed circle that represents the self onto the page with other symbols. Preschool and primary forms measure self-esteem, social interest, identification, minority identification, realism to size, and preference for others. In addition, the primary form measures complexity. These tasks have low visibility for the children, and it is assumed that the symbolic arrangements represent social relations in the child's life space. Further, it is assumed that the particular arrangements contain easily translated common meanings. The test is objectively scored and is based upon the relationship of the symbols to one another. Research that involves self-social symbol tasks is quite extensive; for example, see Long, Henderson, and Zeller (1967); McCandless (1968); Richards (1970); Van Arsdall, Roghman, and Nader (1970); and Velelli (1970).

The choice and/or ordering types of projective techniques also represent a popular form of self-concept assessment. Both the Creelman Self-Conception Test and the Children's Self-Social Constructs Tests represent relatively unique testing approaches that deserve to be investigated more thoroughly.

6. Self-expression. Measures that may be classified as self-expression techniques include those which require the child to combine or incorporate stimuli into some kind of novel production. In this instance the emphasis is upon the manner or style by which the product is created rather than upon the end-product itself (Lindzey, 1961). Any of the direct observational procedures may be employed to obtain the basic data. Doll play and play techniques of all varieties are included in this category as well as techniques which employ role play reflected in the psychodrama techniques. Although these techniques are essentially concerned with ego functioning, none could be located that dealt specifically with self-concept.

E. Combinational Procedures

It is legitimate to ask: can any one type of assessment procedure provide a valid picture of the particular aspect of self-concept under study? Indeed, some psychologists have argued that it is imperative for several procedures to be employed. Citing the peculiar weaknesses of different types of measures, Silver (1965) recommended that a Q-Sort, a sentence-completion blank, and an interview should all be employed in self-concept assessment. Combs and Soper (1963) argued that the individual's perceptive field, his inner world, is composed of forces of which he is aware and those of which he is unaware, and the use of

only one technique cannot assess the full range of this phenomenal self. Combs and Soper employed the observer as instrument technique. And Coopersmith (1967) suggested that the problems of defensiveness and response set can be controlled for by using a combination of subjective and behavioral measures.

1. Observer as instrument. Typically, the behavior of individuals is observed from the point of view of the outsider; that is, the causes of behavior are sought in the stimuli or forces exerted upon the individual. In contrast to this external view, it is possible to seek the causes of the child's behavior in the child's personal experience: the internal frame of reference. The investigation of the child's inner life usually must be approached by an indirect process of inference; that is, from careful observation of behavior (that occurs under varying conditions), it should be possible to infer the nature of the child's perceptual field, which produced the behavior in the first place (Combs and Soper, 1963). The observer as instrument technique, a special form of the inferential technique, refers to measurement approaches which require the observer to infer behavior from a repeated process of observation--inference--prediction--observation--inference, etc. Data are collected from a variety of measurement approaches. Through such a process, it is assumed that observers will come closer to accurate understanding of the child's perceptual field, therefore, the observers are regarded as assessment instruments.

The Perception Score Sheet (Combs and Soper, 1963), a rating scale, is divided into 10 subcategories: self generally, self as instrument, self with other children, self with adults, self with teachers, self and the school curriculum, perceptions of children, perceptions of

adults, perceptions of teachers, and perceptions of school. The child's self-concept is inferred through the use of unobtrusive direct observations, interviews, and projective tests. The direct observations consist of three half-hour periods in which each child is observed while engaged in his normal class activities. During the half-hour interview the observer seeks to engage the child in conversation designed to get the feel of the child and to understand the nature of the ways in which the child sees himself and the world in which he operates. Inferences are also made for each child on the basis of data obtained from three kinds of projective test sessions: free play, a situations test, and a picture-story test. Each time data are obtained the observer rates the child's self-concept on the Perception Score Sheet. These ratings are modified as additional data are obtained. A factor analysis produced the following six factors: general adequacy, acceptable to teacher, adequate to the curriculum, strong enough, important to adults, and important to teachers. In a study that employed the Perception Score Sheet, Combs and Soper had trained observers rate the students and found that children appeared to experience a decrease in adequacy as they moved from kindergarten to first grade.

As a general procedure, observer as instrument should command greater attention. It appears to be a useful (though not a fully validated) method by which massive amounts of data may come under control of the observer-rater. And the large data base is in itself psychometrically correct. Earlier, it was suggested that the use of this technique should be extended to other types of measures. There are drawbacks to this procedure, however. The time needed to collect the basic data

and the training required to produce a skilled observer are costs ill-afforded in the average educational assessment program. More research is needed to see if these problems can be overcome.

2. Subjective-behavioral comparisons refer to procedures which compare the child's actual behavior with his subjective impressions of that behavior. Self-report measures are employed to assess his subjective impression while direct observation and/or behavioral trace procedures are used to assess actual behavior. In his studies with older children, Coopersmith (1967) employed the Self-Esteem Inventory (SEI) as the self-report measure and the Behavior Rating Form (BRF) as a measure of actual behavior. The BRF appears to be a behavioral trace procedure. Coopersmith compared the results of these two measures in relation to the level of self-evaluation and the extent to which subjective and behavioral evaluations were in agreement. Subjects were then assigned to one of five categories. This approach has been effective in a number of research studies concerned with investigating the antecedents of the evaluative aspects of self-concept and should be further investigated with younger children.

III. SELF-CONCEPT TESTS: AN EVALUATION

Approximately 50 different assessment techniques are described and discussed in the preceding pages. All techniques purportedly are designed to evaluate, in some unique way, the self-concept of young children. There can be no argument that the 50 instruments differ, for among the measures reviewed are: checklists, questionnaires, interview schedules, multiple-choice tests, Q-sorts, semantic differentials, and a variety of rating scales. Children, as subjects

for these measures, are directed to choose among alternatives, to order stimuli according to criteria, to complete incomplete drawings, to create stories, to draw pictures of persons, and to otherwise manipulate stimuli.

In addition to these differences, there are tests whose construction features permit them to be administered by the examiner to an individual child. (Ordinarily, such tests are essential for the very young.) Other types of tests can be administered by examiners to small groups of children. Still others, typically given to children who can read, are self-administered. Individual testing is usually the most expensive form of assessment. Self-administered tests are normally more economical. In recognition of these facts, some test constructors have employed multiple forms (i.e., examiner and self-administered forms) in their measurement efforts. By this construction feature, they are able to more easily and economically collect data at different age levels. Multiple forms that use identical techniques have been constructed for some of the instruments that employ drawing of the human figure. Normally, only the characteristics which indicate sex and/or racial or ethnic affiliations are modified.

Most measures are multi-item tests, but several tests that consisted of only a single item were also reviewed. The results of administering some instruments are often summarized in a single score. Other instruments produce multiple scores. And, while most instruments can be administered in less than an hour (often in less than a half hour), there are measures that take more than an hour to administer. Indeed, there are measures that have to be readministered on subsequent days.

Aside from these very obvious format differences, self-concept instruments differ in a more important way: their testing goals or objectives vary. Some of the described measures attempt to determine whether or not the child's self-concept has been formed. Provided the child has a discernible self-concept, there are certain measures that focus upon the adaptive value of that self-concept or, the adjustment level of the child. (Such instruments seem to assess more the self-as-subject aspect than the subject-as-object aspect of self.) Still other measures generally assess the child's self-regarding tendencies, as this term is broadly defined.[26] Finally, there are those instruments that seek to evaluate the child's self-concept under given sets of circumstances, with specific other persons, and/or in particular environments. All these measures not only differ in the content areas they assess, but also vary widely in breadth of coverage.

In general, the measures described in this paper tend to assess fundamentally different things re self-concept, and their final evaluations (even among instruments that employ the same basic assessment approach) are not necessarily comparable. It was earlier reported that low though significant correlational coefficients were obtained when self-report measures were compared to direct observational procedures (DiLorenzo, 1969) and behavioral trace procedures (FitzGibbon, 1970). It was also demonstrated that measures of the subjective-behavioral comparisons variety are based on the premise that different evaluations sometimes result when self-report and behavioral trace procedures are employed to assess the self-concept of the individual child. Additional data related to comparisons of different approaches are available.

Courson (1968), for example, found low correlational coefficients when a direct observational procedure was compared with an observer as instrument procedure. Combs, Courson, and Soper (1963) likewise did not find any significant relationship in a study that compared a self-report measure and an observer as instrument measure. In addition, Combs (1962) strongly indicated that self-report measures are not self-concept measures. Combs believed that the self-report is greatly affected by factors that include the individual's general awareness, availability of adequate symbols for expression, social expectancy, willingness of the individual to cooperate, and the individual's feeling of personal adequacy. Thus, the data indicate that there is little commonality in the final evaluations produced by instruments associated with different assessment approaches. Indeed, there is little to suggest that equivalent evaluations will result from comparisons of instruments within a given major assessment approach. Clearly this area could benefit greatly from additional research.

Theoretically, it is possible (and often advisable) to think of the individual as possessing many self-concepts; e.g., as a learner, as a boy (girl), as a player of games, etc. Purkey (1968) has reviewed a number of articles that argue for such a multidimensional view of self-concept. Several of the more sophisticated instruments examined have been developed by test constructors who have adopted this multi-dimensional notion of self-concept. Such instruments are purported to assess only limited areas of self-concept. More important, however, is that not a single measure reviewed contained contents selected on the basis of sampling from the breadth and scope of possible childhood experiences. This, of course, is a minimum psychometric requirement,

if a given measure is to validly assess the self-concept, as it is broadly conceived. (Earlier it was indicated that self-concept, in general, covers and includes the total range of one's perceptions about his self.) In spite of this, a number of test manuals convey the impression that they are designed to assess global self-concept. Such a condition is not a happy one, for it creates a situation that requires self-concept to be operationally defined as that that is assessed by a so-called self-concept instrument. (The similarity of this definition to the operational definition of intelligence should not be overlooked.) This issue must be examined more thoroughly, even to the point of establishing criteria to select childhood experiences that could be employed in an operational definition of global self-concept.

Although there are always exceptions to the rule (minor ones in this instance), the vast majority of instruments surveyed for this review either will be or have been developed according to the individually-referenced model of test construction. Such tests are designed to provide the user with a reliable device to discriminate among individual students but not necessarily among different types of curricula composed of educational goals or objectives. Thus, by intent, it is unlikely that individually-referenced tests can penetrate to the central issues of the curriculum under evaluation. Regrettably, as a result of the foregoing, the bulk of currently available tests of self-concept are not likely to be of much value to the educator concerned with the development and evaluation of self-concept for young children. (Currently available instruments have value for the guidance director, the clinician,

the researcher and the evaluator concerned with gross comparative differences.) Self-concept tests designed to aid the educator in the evaluation of curricula should be developed according to the criterion-referenced model of test construction. These tests would directly and comprehensively assess those self-concept related behaviors in children that educators intend their intervention program to affect. The data obtained from criterion-referenced tests would enable educators to determine the ways in which students have changed. Educators may also evaluate the extent to which students have reached the set of behavioral objectives that constitute the curriculum related to self-concept.

Summary

That the self literature is not only vast, but also confusing was demonstrated in the first section of this paper, which examined the highlights of self theory. Psychologists use the same term to mean different things, and mean different things when they use the same term. In the second section, some 50 currently available self-concept instruments were described and classified according to the subdivisions of five major assessment approaches. (It is anticipated that the categorization schema devised for this paper will be useful in the management of the large quantities of information related to self-concept test development.) In addition, suggestions were made that indicated which testing approaches deserve further scrutiny. In the third and final section, several important observations were made:

1. The end results of the assessment of self-concept by the use of different assessment approaches or techniques will not necessarily be comparable.

2. Inappropriate test development vis-a-vis self-concept theory has created the need to operationally define self-concept as that that is assessed by so-called self-concept tests.

3. The bulk of currently available self-concept tests is not very useful in the evaluation of self-concept curricula.

It is recommended that psychologists should attempt to unravel the self literature; and should attempt to explain more clearly what different theorists mean by different terms and how different theories of self are related. More research effort should be expended to determine the relationships among different self-concept instruments. Also, criteria should be established by which "global self-concept" can be operationally defined. In addition, it was suggested earlier that the new model for self-concept test construction should be that that is implied in criterion-referenced test development. In short, the area of self-concept testing requires a "new look."

FOOTNOTES

1. Wylie (1961) lists close to 1,000 references that deal primarily with self-concept and its assessment. References that deal with other definitions of self were not necessarily included.

2. The perplexing plethora of papers and books that refer in some way to a poorly or diversely defined "self" surely must confuse the unsuspecting reader. Multifarious terminology has not helped matters. Ruth Wylie's pungent criticism of self literature is cogent here. She writes, "Any given theorist, often seems to include several quite disparate ideas under one 'self'-referent label, while using several different labels to indicate what appears to be the same idea. Moreover, there is no consistency in usage among theorists" (1968, p. 729). That this statement is all too true is evidenced by an examination of the lexicon of Standard American English which is replete with references to self: I, me, mine, my, and myself occur frequently in everyday conversations. In a less obvious way, psychological constructs such as: actor agent, ego, individual, mind, organism, person, personality, proprium, psyche, social, spirit, subject, and others too numerous to list here are connected historically and theoretically to the concept of self. In addition, English and English (1958) noted that there are nearly a thousand combined forms of words beginning with the term "self;" e.g., self-consciousness, self-esteem, self-regard, and so on.

3. Descartes had originally distinguished mind as knower, or subject of knowledge from what is known, or the object of knowledge.

4. Allport (1943) discussed these issues in a thought provoking article.

5. Descartes had reached the conclusion "I think, therefore I am."

6. Few, if any, contemporary psychologists would accept Dewey's view of psychology unaltered--it is a rather confining conception. Most, however, would agree that the study of self is an important, if not vital, subject area for social scientists to investigate.

7. Titchener (1898) mentioned Dr. Mercer, who believed that "self" meant stomach. He felt that the alimentary organic sensations were most important in the perception of self. Allport (1943) reported on the efforts of some scholars to localize the ego; e.g., between the eyes, and in the head, heart, face, genitals, etc.

8. Mead published very little. Much of his work was posthumously edited and published by others.

9. Calkins (1915), like Dewey, attempted to draw attention to the self as a central conception for psychology.

10. The effects of such thinking were felt for a long time. Diggory (1966) has written recently that the main thesis of his text Self-Evaluation: Concepts and Studies, was that "psychology, the method of experimental thinking should and can be intruded into a field where it has so far not penetrated very deeply. This is the field of problems relating to the notion of self" (p. 1).

11. Cofer and Appley (1964) described the functions of the ego as follows: "The ego performs its task by (1) observing accurately what exists in the external world (perceiving), (2) recording these experiences carefully (remembering), and (3) modifying the external world in such a way as to satisfy the instinctual wishes (acting). Failing this last, the ego must hold off the discharge of energy until such modification can be brought about or an appropriate substitute found" (p. 609).

12. Furtmuller (1964), a close associate of Adler's, pointed out that "the working hypothesis (of Adler's psychology) was that the various actions and ideas of an individual could not be explained as caused by isolated psychic powers like drives, or motivated by certain isolated experiences like traumas, but only in connection with the whole of the individual's psychic picture" (p. 364). Thus, Adler's model of man was close to that conceived by Gestalt psychologists: the whole is more than the sum total of its parts and therefore cannot be explained by any partial process (Dreikurs, 1963).

13. In Dreikur's (1963) analysis of Adlerian psychology, he indicated that there are three major tasks that everyone must face. First, he has to contribute in a useful way through his work. Second, he has to make friends with his fellow men and participate with them in common endeavors. Third, he has to establish a satisfactory relationship with a person of the opposite sex. A person is thought to be well adjusted if he can meet these problems in a satisfactory fashion. If he cannot, he is considered maladjusted.

14. Even though Freud laid the foundations for ego psychology, his psychology, like Jung's, was primarily an id psychology. Freud insisted that the ego had no energy of its own, and that its existence was dependent upon the id. Allport (1961) commented that Freud's conception of the ego left it "frail and relatively inconsequential. It ascribes to consciousness a passive and secondary role." Allport also suggested that it is this "one-sidedness that modern ego-psychology tries to correct." At issue, then, is the relative importance of unconscious and conscious forces to develop and maintain individual behavior. As Allport questioned: "Does the conscious layer have an autonomy and function of its own, or does it always serve the purposes and motives that are deeply imbedded in the unconscious?"

15. The emotional upheavals experienced now by many children in California result, in part, from children experiencing the anxiety of their "godlike" parents during the recent earthquakes and is a good case in point.

16. Other definitions also exist; for example, Bills, Vance, and McLean (1951) defined the self-concept as "the traits and values which the individual has accepted as definitions of himself." Jersild (1952) defined self-concept or self as a "composite of thoughts and feelings which constitute a person's awareness of his individual existence; his conception of who and what he is." Perkins (1958) likewise argued that at the base of self-concept are those perceptions, beliefs, feelings, and values that one takes as descriptive of himself. Strong and Feder (1961) discussed self-concept in terms of inferences. They argued that "Every evaluative statement that a person makes concerning himself can be considered a sample of his self-concept, from which inferences may then be made about the various properties of that self-concept."

17. A more extensive description of many of the instruments referred to has been provided in annotated bibliographies of self-concept measures. See, for example, Coller (1970) and Coller and Guthrie (1971). Coller and Guthrie (1971) is a revised and modified version of Coller (1970) and was published by the ERIC Clearinghouse on Tests, Measurements and Evaluation. For projective techniques, see Rabin and Haworth (1960).

18. Note, that if the respondent was asked to asses the behavior as it occurred and not rely upon memory, the self-same instrument could conceivably be classified as a direct observational procedure.

19. It may be concluded, therefore, that it is incorrect to treat a measure as a projective technique simply because the respondent is unaware of the testing objectives.

20. Self-as-subject score is the self-referent score.

21. Brown discussed the possibility that white examiners may have negatively influenced the scores of the black Ss in this study.

22. The BIDSSCRT is now being employed by Educational Testing Service in a study of Head Start; over 1,000 children are being assessed for self-concept.

23. In a report by Cicarelli, et. al. (1969), this test is regarded as a "projective measure of the degree to which the child has a positive self-concept." (pp. 4-5). [Italics ours]

24. The How Much Like Me? scale has been used sparingly and has not been standardized. Private communication, Dysinger, 1970.

25. The use of the term "projective" in the Children's Projective Pictures of Self-Concept is interpreted as referring to an identification process. However, it should be noted that, for reasons explained earlier, some disagreement with the way this particular category of testing techniques is employed is anticipated

26. Wylie (1961) suggested that the term "self-regard" should be used generically to include: self-satisfaction, self-acceptance, self-esteem, self-favorability, congruence between self and ideal self, and discrepancies between self and ideal self.

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